AWS Response to MassTech RFP for AI Hub Data Commons Collaborative Consulting Services

Solicitation No. 2026-JAII-01
October 7, 2025

AWS Response to MassTech RFP for AI Hub Data Commons Collaborative Consulting Services

Submitted by:
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Submitted to:
Massachusetts Technology Collaborative
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Attn: Sabrina Mansur
Procurement Team Leader
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AWS is pleased to submit the attached package for your review. AWS has provided answers based on its current knowledge, but these answers may change due to a variety of factors, including changes in your requirements, the capabilities of any third party selected to assist with implementation, and changes to AWS service offerings. Unless required by law, Customer agrees not to disclose the contents of this document. Where Customer is required to disclose document contents by law, Customer will provide AWS with written notice and an opportunity to seek redactions or otherwise prevent disclosure of the information to the maximum extent permitted by law. This package may include a set of suggested solutions for this opportunity. These solutions are potential suggestions for your evaluation based on our limited understanding of Customer's requirements. The responsibilities and liabilities of AWS to its customers are controlled by AWS agreements, and this document is not part of, nor does it modify, any agreement between AWS and its customers. For current prices for AWS services, please refer to the AWS website at www.aws.amazon.com.

October 7, 2025

Massachusetts Technology Collaborative
75 North Drive
Westborough, MA 01581-3340
Attn: Sabrina Mansur, Procurement Team Leader

Re: RFP for AI Hub Data Commons Collaborative Consulting Services (No. 2026-JAII-01)

Dear Sabrina Mansur and RFP Evaluation Committee:

MassTech's RFP for the Data Commons Collaborative (DCC) initiative presents an opportunity to modernize how Massachusetts develops and deploys AI. This component of the Massachusetts AI Hub can accelerate innovation across the Commonwealth by centralizing secure data access, synthetic data generation, and ethical AI development. An effective DCC will serve government agencies, businesses, universities, and researchers throughout Massachusetts.

The Massachusetts State Government has engaged Amazon Web Services, Inc. (AWS) to power mission-critical workloads since 2016. AWS also supports other leading enterprises, healthcare organizations, research institutions, and innovative startups in the Commonwealth. We have a strong track record of delivering reliable, secure, and scalable cloud solutions throughout Massachusetts, such as supporting critical tax and Medicaid systems and facilitating vital research at life sciences companies. This established presence, along with our experience supporting public sector missions and private sector innovations, demonstrates our unique ability to advance MassTech's current priorities. Our team is already engaged in the AI Hub project as a participating member of the AI Strategic Task Force, putting forward recommendations to balance innovation with ethical considerations and security requirements.

AWS has both the technology and delivery capability to create a future-ready DCC that is beneficial to all participating members. AWS Professional Services (AWS ProServe) has experience designing and implementing data commons and AI services for government agencies and research institutions worldwide. We have delivered similar solutions for both public and private sector organizations, helping them achieve their goals for secure data sharing and AI innovation.

Our proposed approach for MassTech implements AWS's comprehensive cloud services and incorporates leading practices for security, compliance, and ethical AI development. The full scope of our implementation plan is described in the attached draft Statement of Work. Our response also includes the completed Application Cover Sheet (Attachment A), a detailed application outlining our proposed technology and timeline, and the signed Authorized Signature and Acceptance Form (Attachment B).

We can discuss our proposal in greater detail and present additional information about how AWS can help MassTech achieve your vision for the DCC. Please contact me if you have any questions about our response.

Respectfully,

Jared Ripps
Principal Account Executive, Professional Services
Amazon Web Services, Inc.

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1 Attachment A

RFP Sec 3.1.b (bullet 1)

AWS Application Cover Sheet

Name of Respondent Amazon Web Services, Inc.			
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Authorized Signatory DocuSigned by: Christian Hoff F5B77060559E420...		**Authorized Signatory E-mail Address** aws-wwps-contract-mgmt@amazon.com	
Legal Status/Jurisdiction (e.g., a Massachusetts Corporation, LLC, LLP, etc.) Amazon Web Services, Inc. is a subsidiary of Amazon.com, Inc., a Delaware Corporation		**Respondents W-9** Provided below in AWS Application section **Respondents UEI No.** NQEWN6C1LSU5	

2 Executive Summary

The Commonwealth of Massachusetts is a global leader in research and technology—a position gained through strategic partnerships, sustained investments in high-performance computing and AI, and its role as home to some of the world's most innovative enterprises. With the Massachusetts AI Hub announced in 2024, the Commonwealth stands to further strengthen its competitive edge in the global technology landscape, building on its reputation for breakthrough innovation across AI, robotics, biotechnology, and emerging technologies. This collaboration between government, industry, startups, and academia is posed to streamline AI integration and accessibility across sectors, promoting a cohesive approach to adopting this new technology.

Amazon Investments in Massachusetts

$23 billion invested since 2010

18,000 full and part-time jobs created as of January 2024

39,000 indirect jobs supported, on top our direct hires

$21 billion added into state GDP

Amazon Web Services, Inc. (AWS) has worked with Commonwealth of Massachusetts government agencies and higher education institutions for years. We currently support most of the Commonwealth's critical cloud workloads, such as those supporting tax and Medicaid applications. We also served as a member of the Commonwealth's AI Strategic Task Force and stand ready to support ongoing or future projects such as MassTech's DCC initiative.

Advancing MassTech's Mission

The Massachusetts AI Hub unites government agencies, businesses, and universities to accelerate AI development. MassTech, on behalf of the Massachusetts AI Hub, is launching the DCC as a critical next step in the project. This infrastructure will facilitate data sharing with strong safeguards for privacy and ownership, giving stakeholders the resources they need to drive AI advancements.

To support this vision, AWS offers a complete AI/ML lifecycle within one secure environment for the DCC. Our security measures include encryption protocols, access controls, and network safeguards. We track model drift and bias, and document AI operations through systematic monitoring.

This security-first approach aligns with a modern data strategy that democratizes access to secure, reliable, and AI-ready data. Our recommended approach for MassTech stems from our proven data methodology, which modernizes how organizations manage, process, and apply data to generate business value. By implementing this strategy, MassTech can establish a powerful foundation to ingest, store, query, and analyze data using AI and ML models—including large language models (LLMs)—ultimately helping your end users discover new data-driven insights.

Collaborating to Meet Your Goals

AWS Professional Services (AWS ProServe) proposes to design and deploy the DCC. AWS ProServe is our in-house team that executes customer projects and provides strategic guidance on cloud architecture and adoption roadmaps. We will work alongside MassTech and offer strategic guidance, technical expertise, and implementation services. Our team will also help develop a comprehensive data strategy for the AI Hub to effectively collect, manage, share, and analyze data to maximize the results of AI initiatives. This consulting relationship will allow all stakeholders to benefit from the DCC's capabilities, from initial deployment through ongoing operations.

AWS ProServe will deliver a comprehensive design that addresses the DCC's goals and supports your many stakeholders, as detailed in the *Solution Architecture* section of our response. We will implement the solution in phases over 48 weeks, as discussed in the *Implementation Overview* and the included draft AWS Statement of Work. Each project phase covers specific service areas as we deploy your data at scale using AWS infrastructure.

Our proposed program focuses on three primary objectives:

1. Creating a purpose-built DCC that meets your specifications
2. Integrating security, compliance, and ethical AI practices with the design
3. Equipping stakeholders with tools and knowledge to collaborate effectively, driving innovation, and adapting the DCC for future needs.

Delivery for All Stakeholders

Public Sector Experience. MassTech will benefit from our extensive experience supporting over 7,500 government customers. We serve diverse public sector customers across the U.S., including federal and state agencies, local governments, higher education institutions, and government technology organizations as they adopt and use our capabilities for internal operations and citizen-facing services.

Private Sector Experience. Our private sector portfolio includes some of the nation's largest and most complex organizations, such as Commonwealth companies Fidelity, MassMutual, Rapid7, Vertex, and Moderna. We have helped them build scalable, secure IT solutions that deliver measurable business value.

Cloud Security and Agile Innovation

Fidelity and Merck built AWS security controls across multiple accounts, while maintaining their software development priorities. Their teams created specific rules for security and compliance to protect sensitive data, allowing developers to build and release software. MassTech can apply these proven approaches to safeguard your AWS environment without sacrificing momentum.

Architecting for the Future

AWS brings a unique advantage to this initiative through our cloud infrastructure and cloud experts. We can both architect and build the DCC, with our AWS ProServe team working alongside MassTech, offering strategic guidance, technical expertise, and proven implementation practices. The AWS plan supports your DCC objectives and long-term vision.

Centralized Access and Intelligent Curation. Our solution is designed to connect users to essential datasets through a web interface. AWS technology can catalog data and monitor usage through Commons Credits, while helping to protect sensitive information.

AI Acceleration, Cross-Team Collaboration, and Scalable Growth. The DCC can speed up AI development in Massachusetts through datasets and tools that remove entry barriers and break down silos. Our scalable infrastructure can grow with AI projects, while maintaining performance and helping to protect your investments.

Comprehensive Security, Compliance, and Ethical Governance. AWS security controls equip you to protect sensitive data, control access, and create transparency for AI development.

3 AWS Application

RFP Sec 3.1.b (bullet 2, 1st sub-bullet) A description of the firm responding to the RFP (including descriptions of proposed subcontractors, if any) and the firm's qualifications to perform the Services.

AWS Overview

AWS is the world's most broadly adopted cloud, offering over 200 fully featured services from data centers globally. Millions of customers, including fast-growing startups, higher education institutions, and leading government agencies use AWS to lower costs, increase agility, and accelerate innovation. We support an almost limitless variety of workloads for our customers.

Our services include infrastructure fundamentals like compute and storage, advanced analytics, ML, and AI capabilities. Our continual innovation helps customers maintain state-of-the-art IT infrastructure without having to make recapitalization investments. We augment our services with a variety of supporting components, such as the following:

- Management tools
- Networking services
- Application augmentation services, with multiple interfaces to AWS application programming interface (API)-based services such as:
  - Software development kits
  - Integrated development environment toolkits
  - Command line tools.

AWS ProServe Qualifications

AWS ProServe offers advisory services to help our customers modernize technologies, define organizational needs, and plan for continuous innovation. The team provides skilled advisory resources, cost and performance optimization services, and the latest cloud technologies, such as generative AI, image recognition, cloud-based call centers, and advanced analytics.

AWS ProServe has completed over 4,000 projects for more than 1,500 customers. They have over 30 specialty practices that cover various solutions, technologies, and industries. The global team of AI/ML specialists, solutions architects, and technical program managers work directly with customers to design and deliver solutions that drive measurable business outcomes.

AWS ProServe's over 6,000 certified consultants have earned more than 30,000 AWS certifications pertinent to their roles. Beyond their grounding in AWS technologies, AWS ProServe consultants are proficient in industry-standard tools such as Jira, MS Project, Trello, Confluence, GitHub and AWS CodeCommit, and Agile and Scrum methodologies.

AWS ProServe will be responsible for overall project delivery and direct program management for MassTech. They often collaborate with vetted and experienced members of the AWS Partner Network (APN). APN companies offer value-added software, developer tools, and consulting expertise to help deploy AWS-based solutions for our customers. AWS ProServe anticipates managing one or more AWS Partners for select tasks such as frontend development, testing, and training.

RFP Sec 3.1.b (bullet 2, 2nd sub-bullet) The proposed approach to providing the Services.

Figure 1 and the *Solution Overview* describe our proposed approach to designing and deploying the technical foundation for the DCC. See the *Implementation Overview* and the included draft AWS Statement of Work for our plan to implement the solution.

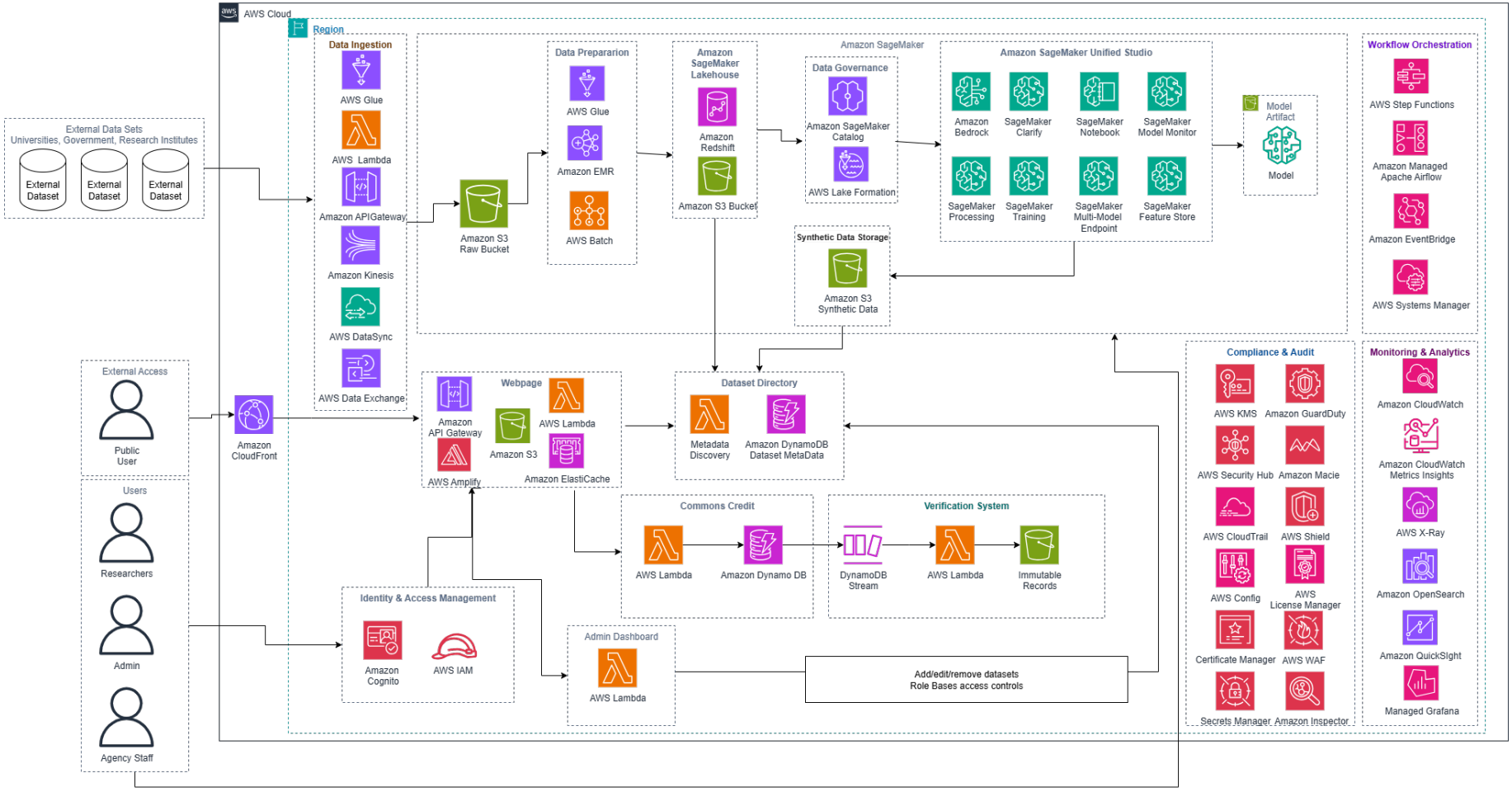


Figure 1. Proposed Solution Architecture for the Massachusetts AI Hub DCC. *The DCC on AWS will facilitate extensive and role-based data sharing, efficient and ethical AI development, and powerful performance and security.*

Solution Overview

MassTech requires a scalable and secure DCC platform that centralizes data for AI development, generates synthetic data, and promotes ethical AI practices. AWS solutions architects designed a technical approach to accelerate AI innovation by offering shared, trusted data and model commons across government, academia, and industry.

Our proposal describes the key features and benefits of the future AWS-based solution. We anticipate refining the required functionality, technical architecture, and implementation plans based on further scoping with MassTech and other DCC stakeholders.

We designed our proposed solution to align with these DCC project priorities:

Secure, Centralized Data Access. We provide a multilayered data architecture (raw, staging, curated) to facilitate data quality, security, and governance while enabling fast (<2 s) queries for research and analytics. This includes access to over 100 external datasets (e.g., Hugging Face, NASA, World Bank), plus curated Massachusetts government data (e.g., MassGIS, MBTA, DPH) through a single, searchable interface.

External Systems Integration. The proposed solution extends beyond hosted datasets by providing streamlined connectivity to existing enterprise systems, including Snowflake data warehouses, through AWS DataSync, AWS Glue connectors, and native APIs for secure data ingestion and federation without requiring full migration. Amazon SageMaker Unified Studio orchestrates these external connections while maintaining data lineage and governance. External institutions can maintain their current data infrastructure while accessing the data commons catalog through Amazon API Gateway REST and AWS AppSync GraphQL APIs, facilitating controlled and auditable data sharing across organizational boundaries.

AI/ML R&D Enablement. Researchers will benefit by using Amazon SageMaker integration, collaborative notebooks, bias detection, fairness monitoring, and access to both foundation and custom models. Users can move smoothly from data discovery to analysis and AI/ML development within a single environment. Integrated synthetic data tools (SDV, Synthea, CARLA) can facilitate privacy-preserving AI development, rare scenario simulation, and data augmentation for powerful model training. Built-in bias detection, fairness monitoring, and mitigation tools (e.g., AIF360, Fairlearn) promote equitable AI development. Additionally, Amazon SageMaker Unified Studio, a single development environment for AI and analytics, enables secure connections to hybrid data sources, including on-premises databases and file systems.

High Scalability. The AWS-based solution can also be scaled to support MassTech's growing AI ecosystem, such as single experiments or broad deployments. Our serverless and containerized components scale to handle peak workloads, supporting reliability for petabyte-scale data. The architecture is also designed to meet response time requirements through optimized storage, caching, and partitioning strategies.

Security and Compliance. We help protect sensitive data with multilayer defenses, encryption, Single Sign-On, and continuous monitoring with threat detection. The unified AWS security model across all AI/ML services is designed to eliminate integration vulnerabilities. Our fine-grained, role-based access control and automated metadata management facilitates compliance, discoverability, and transparency.

Technical Components

Amazon SageMaker and Amazon SageMaker Unified Studio can create a unified environment for both technical and non-technical users to develop AI solutions that address practical needs. Amazon Bedrock will natively integrate leading foundation models and connect with other AI service or model providers, giving users the freedom to choose the right tools for each challenge. Amazon CloudFront and AWS Amplify power a web portal where users can search for, discover, and access the resources they need to solve problems. Amazon QuickSight can deliver intuitive data visualizations, helping everyone—such as policy makers and community organizations—uncover insights that drive change.

Our design includes a credit-based incentive system that encourages community engagement. This mechanism rewards data contributions, promotes efficient resource usage, and sustains participation through transparent credit tracking and governance. Smaller organizations, educational institutions, and public sector agencies gain access to enterprise-grade AI capabilities, which reduces barriers to entry.

Public Access and Data Governance

The design allows users to access tools and experiences that match their specific needs, while equipping them to comply with Commonwealth data laws. The public web portal helps visitors search, preview, and download open datasets without signing in, making government data accessible for reuse.

For researchers and AI/ML developers, our design creates an advanced environment designed to accelerate discovery. When they log in with their credentials, customized dashboards can highlight active projects and recommend relevant datasets. Search capabilities span hundreds of datasets, complete with quality scores that help teams make informed decisions. Shared notebooks allow for real-time collaboration between peers working on breakthrough research.

AI Development Features

With one click, researchers launch GPU-powered training jobs, which would otherwise take hours to configure. Our synthetic data generation helps teams overcome data scarcity challenges. Built-in fairness tools detect bias in models, helping researchers build AI that serves everyone equitably.

Data Management and Compliance

Data analysts may access the solution through intuitive dashboards designed for dataset management. Our plan entails configuring automated pipelines to strip out personal information and verify data quality, protecting sensitive information while maintaining research value. The system is designed to track dataset usage in research projects, creating transparency for teams, and to streamline access request reviews and approvals. Amazon QuickSight is available to generate visual reports that transform complex data into clear insights. AWS services will facilitate comprehensive compliance records, with complete audit trails designed to meet regulatory standards and give you confidence during reviews.

Collaboration

The AWS solution will help government departments and industry partners engage through secure environments meant to balance collaboration with data protection. They can prototype using Amazon Bedrock foundation models, browse a marketplace of datasets and resources,

and collaborate privately with academic researchers. Our plan includes a credit system to reward their contributions and help track the impact of their work.

Administrative Control

Finally, administrators can monitor and control the platform through their dashboard. The dashboard will be designed to show system performance metrics, what users do on the platform, and potential security issues in real-time. Administrators can also manage new user setup, control who can access what, and distribute computing power and storage space. This oversight is meant to keep the platform running smoothly for all users.

Implementation Overview

Establishing the AWS Foundation

Our implementation strategy entails large-scale data deployments using AWS services during a phased, service-oriented approach over 48 weeks. We will establish a multi-account foundation using AWS Organizations to create clear boundaries between different functions and to strengthen your security posture. We will deploy the AWS Landing Zone Accelerator solution to facilitate parallel development across your eight desired service areas.

We combine automated infrastructure deployment using AWS services with structured program management using our global delivery framework. This means your project gains momentum while maintaining control and visibility. Our continuous integration/continuous deployment (CI/CD) pipelines support continuous development, while AWS native services such as AWS CloudFormation and AWS Systems Manager handle infrastructure as code, designed to reduce manual errors and accelerate delivery.

We organize each service area into focused two-week sprints. Your stakeholders will review progress regularly and participate in iterative testing cycles. This approach keeps your teams informed and helps prevent expensive changes later in development. Our technical teams build components using serverless architectures—cloud functions that automatically scale without managing servers. AWS Lambda handles your code execution, API Gateway manages your application interfaces, and our managed services form the core capabilities that your users will depend on.

Our approach maintains agile development practices and delivers strong security, governance, and quality controls throughout the implementation. MassTech will accelerate time-to-value with enterprise standards for operational excellence.

The solution will establish a well-structured organizational unit hierarchy with dedicated AWS accounts for each functional area. This separation is designed to protect your data and operations while giving teams the independence they need to innovate. The architecture we build will span multiple Regions and deliver high availability by design, creating an environment that automates routine tasks while maintaining the security standards your organization requires.

We will implement sophisticated network routing using AWS Transit Gateway, along with comprehensive security measures including AWS Identity and Access Management (IAM) Identity Center integration, AWS Config Rules, automated guardrails, and encryption via AWS Key Management Service (AWS KMS) and Secrets Manager. We will use AWS CloudTrail, AWS CloudWatch, and AWS X-Ray integration for monitoring and logging. We will also deploy comprehensive monitoring infrastructure, implement cost optimization strategies, create detailed operational runbooks, and establish automated backup and retention policies.

Service 1: Program Management & Coordination

RFP Sec 2, Services Required: Service 1

Our integrated program management approach keeps your important initiatives on track through coordinated project planning, stakeholder alignment, and milestone achievement. Our team will create and maintain a comprehensive project plan featuring detailed work breakdown structures that align directly with your priorities. We will establish a governance framework that defines clear decision-making processes and resource allocation methods, giving you visibility and control over project progress while reducing delays and budget overruns.

Your dedicated engagement manager leads this service using our global delivery framework—a proven process to guide your project from start to finish. Our governance approach combines our effective methods that create strong alignment between stakeholders, addresses risks early, and promotes success throughout the project lifecycle.

AWS will maintain stakeholder engagement through structured weekly status updates and sprint reviews. Our project management team will coordinate communication across all services, connecting technical and business teams to keep your project moving forward. We will establish clear escalation procedures and issue resolution protocols to address challenges when they arise. AWS will actively manage scope changes and timeline adjustments, maintaining transparent communication with all stakeholders throughout your project.

Our change management and operational readiness strategy features comprehensive stakeholder engagement through regular communication sessions and tailored training programs for different user groups. We will develop detailed documentation and knowledge transfer materials and establish a change management board to oversee significant changes. Using workforce readiness evaluations, skills assessments, and gap analyses, we will identify areas requiring additional support or resources. We address gaps through personalized learning paths, hands-on workshops, and practical simulations, complemented by staff mentoring programs.

We will implement a comprehensive transition plan to facilitate a smooth operational handover. To promote your long-term success, we will work with MassTech to establish a framework for ongoing support, develop a continuous improvement roadmap, implement a powerful knowledge management system, and maintain a feedback loop for addressing emerging needs. This holistic strategy prepares your organization to use the new AWS environment effectively going forward. We focus on building sustainable capabilities within your team, so they can independently manage the AWS infrastructure to maintain operational excellence and security standards.

Service 2: Technical Architecture & Platform Development

RFP Sec 2, Services Required: Service 2

The DCC's technical architecture will rely on AWS, using technologies that scale automatically as needed. We will create an intuitive interface with AWS Amplify and React, backed by Amazon API Gateway and AWS Lambda functions that run only when needed. Amazon CloudFront can distribute content, while AWS Web Application Firewall (AWS WAF) is designed to protect against web threats. The solution will include Amazon ElastiCache for efficient performance and Amazon DynamoDB to store and manage user sessions and preferences.

Our comprehensive metadata management system is the foundation of the planned data commons, built on AWS Glue Data Catalog and AWS Lake Formation to support FAIR data principles and make research discoveries accessible to your teams. We will implement

advanced search capabilities using Amazon OpenSearch, designed to help researchers find the data they need quickly. AWS Glue Crawlers and AWS Glue DataBrew can automatically discover metadata and profile data, reducing manual work for your data teams.

We will manage role-based access through AWS IAM Identity Center and Amazon Cognito. AWS IAM roles and AWS Lake Formation can control fine-grained permissions to protect sensitive research data while maintaining collaboration.

AWS will build the Commons Credits system on Amazon DynamoDB, designed for real-time transaction processing that keeps pace with your community's needs. Our Lambda functions can execute credit logic while Amazon EventBridge orchestrates transaction events, delivering the transparency your users require when accessing shared resources.

Our comprehensive APIs connect through Amazon API Gateway and AWS AppSync, giving your teams an integration foundation. AWS CloudWatch tracks usage analytics while Amazon QuickSight dashboards help visualize this data. This design promotes clear insights into system performance and user engagement, helping you make informed decisions going forward.

Service 3: Dataset Curation and Integration

RFP Sec 2, Services Required: Service 3

Our dataset curation and integration strategy focus on creating a diverse and high-quality data foundation that drives meaningful insights for DCC users. We will help you curate an initial set of datasets across multiple domains, transforming and standardizing them through AWS Glue extract, transform, and load (ETL) jobs—automated processes designed to clean and organize data. AWS DataSync can securely transfer Massachusetts-specific datasets to protect sensitive personal information. AWS Data Exchange can integrate external commercial datasets that expand your analytical capabilities. Amazon SageMaker Data Wrangler assesses dataset quality and prepares your data for analysis, turning raw information into actionable intelligence.

To help complete metadata and adhere to FAIR data principles, we will implement AWS Glue Data Catalog with custom metadata schemas supporting Dublin Core, Schema.org, and DCAT standards. This approach is designed to transform scattered data into discoverable, reusable assets that accelerate research and decision-making.

We included AWS Glue DataBrew to automate data profiling and quality assessment, giving your teams confidence in data accuracy. AWS Lake Formation governs data access and tracks lineage, improving visibility into how information flows through your organization.

We will build ingestion pipelines using AWS Glue ETL, Amazon Kinesis Data Firehose, and AWS DataSync. Amazon Simple Storage Service (Amazon S3) versioning and AWS Lake Formation support version control, protecting against data loss while maintaining historical records.

AWS Step Functions can orchestrate complex ingestion workflows, coordinating multiple processes without manual intervention. Amazon CloudWatch then monitors pipeline performance, designed to alert your teams before issues impact operations.

Service 4: Synthetic Data Capability

RFP Sec 2, Services Required: Service 4

Our synthetic data capability is designed to integrate multiple tools including SDV, Synthea, and CARLA, using Amazon Elastic Container Service (Amazon ECS) containers and AWS Batch for scalable processing. We will build a comprehensive synthetic data generation framework within Amazon SageMaker Unified Studio, supporting structured, unstructured, time-series, and image data. Synthetic datasets can be stored in Amazon S3 with metadata managed by AWS Glue Data Catalog.

AWS Step Functions can orchestrate generation and validation pipelines, with Amazon SageMaker Processing jobs handling data synthesis to accelerate research work. Our quality validation harnesses Amazon SageMaker Clarify for bias detection, helping protect the integrity of your synthetic datasets. Amazon SageMaker Experiments and Amazon SageMaker Model Registry track synthesis parameters and model versions, giving data scientists better visibility into their work.

To safeguard privacy and promote compliance with your regulatory requirements, we will implement differential privacy techniques using Amazon SageMaker and AWS Lambda for privacy risk scoring. AWS CloudTrail can maintain comprehensive audit trails that document every action, while our governance workflows establish clear approval processes for synthetic data usage. This approach helps change compliance from a burden into a competitive advantage, building stakeholder confidence in your synthetic data capabilities.

Service 5: AI Fairness and Bias Framework

RFP Sec 2, Services Required: Service 5

Our AI bias detection system is designed to combine three tools to find and fix unfair patterns in data and ML models. Amazon SageMaker Clarify scans datasets and models for bias. Two specialized fairness tools, AIF360 and Fairlearn, run as processing jobs in Amazon SageMaker Studio to analyze results. Amazon SageMaker Model Monitor then applies corrections before, during, and after model training to reduce detected bias.

To document and visualize how bias affects real people and communities, our plan includes establishing automated workflows using AWS Step Functions and storing bias assessments in Amazon DynamoDB. We will create fairness reporting dashboards using Amazon QuickSight, designed to make bias patterns visible and actionable for your teams. Amazon SageMaker Experiments can track bias mitigation experiments, while Amazon SageMaker Model Registry maintains fairness metadata for ongoing accountability. We will implement community and stakeholder engagement mechanisms for fairness oversight through AWS Lambda functions that automate bias reporting. Amazon Simple Notification Service can send timely notifications to stakeholders who need to stay informed.

Service 6: Security, Governance & Compliance

RFP Sec 2, Services Required: Service 6

The DCC is secured through multilayered protection to put you in control. AWS IAM Identity Center and Amazon Cognito work together to verify user identities with multi-factor authentication, while AWS Lake Formation lets you set precise permissions for each dataset. AWS Organizations controls policies to help you maintain strong governance across accounts, as Amazon GuardDuty and AWS Security Hub actively monitor threats. This comprehensive security approach is designed to protect your data while giving users the access they need.

We implement logging and audit trails across all functions to help protect your data and maintain accountability. AWS CloudTrail captures every API call, storing records for over three years in Amazon S3 Glacier so you can trace any action back to its source. Data is encrypted at every stage. AWS KMS helps secure data at rest while AWS Certificate Manager handles Transport Layer Security encryption for data in transit.

Our compliance monitoring works continuously on your behalf. AWS Config tracks configuration compliance, and Amazon Inspector conducts ongoing security assessments to identify vulnerabilities early. We define and enforce comprehensive terms of use and data usage agreements that respect user privacy. Amazon DynamoDB manages consent preferences, with Amazon DynamoDB Streams designed to track consent changes in real-time, giving users control over their data.

Service 7: Testing, Rollout, and Adoption

RFP Sec 2, Services Required: Service 7

Our testing strategy is designed to protect your users through quality assurance across all functions. We run automated testing frameworks and CI/CD pipelines with the aim to catch issues before they impact your users.

Amazon Inspector scans security vulnerabilities that could expose sensitive data. AWS WAF tests web applications to block malicious attacks. We conduct rigorous performance and load testing to address your specified requirements. AWS X-Ray traces requests end-to-end, designed to pinpoint bottlenecks that slow down user interactions. This visibility helps optimize performance where it matters most to your business.

AWS will conduct training for end users and administrators across diverse stakeholder groups to promote successful adoption. Our approach includes hands-on training sessions and workshops, plus comprehensive documentation and support materials that help teams master new capabilities.

During the public launch, AWS will offer dedicated technical support and monitoring. We will guide initial user onboarding and track performance and user feedback throughout this critical phase, helping you achieve a smooth transition that builds user confidence.

Service 8: Deliverables

RFP Sec 2, Services Required: Service 7

Our deliverables strategy focuses on comprehensive documentation and tangible outputs that demonstrate how the system works. AWS will generate an integrated project plan using AWS Systems Manager, complete with detailed work breakdown structures, critical path analysis, and resource allocation matrices that keep your team informed at each milestone. We will develop technical architecture documentation using the AWS Well-Architected Tool, which is designed to capture all AWS services integration with detailed specifications for security, scalability, and performance that your stakeholders need to make confident decisions.

We will deploy AWS Glue Data Catalog with Lake Formation governance and implement FAIR data principles. Metadata schemas are designed to support multiple standards. Amazon SageMaker Unified Studio can generate synthetic data and provide sample datasets across multiple domains with quality validation reports. Amazon QuickSight can display fairness dashboards integrated with various bias detection frameworks. Security and governance documentation will describe how we implement role-based access control, dataset tiering, encryption, and audit logging capabilities.

AWS will prepare detailed training materials, produce support documentation, and pilot user feedback mechanisms to accelerate successful DCC adoption. Our team will demonstrate the Commons Credits system through sample transaction outputs, clearly showing how users earn credits and navigate spending workflows. We will also develop a targeted stakeholder engagement strategy that connects your initiative with Massachusetts' AI community—building meaningful partnerships with universities, government agencies, startups, and other organizations to amplify the impact of this important development project.

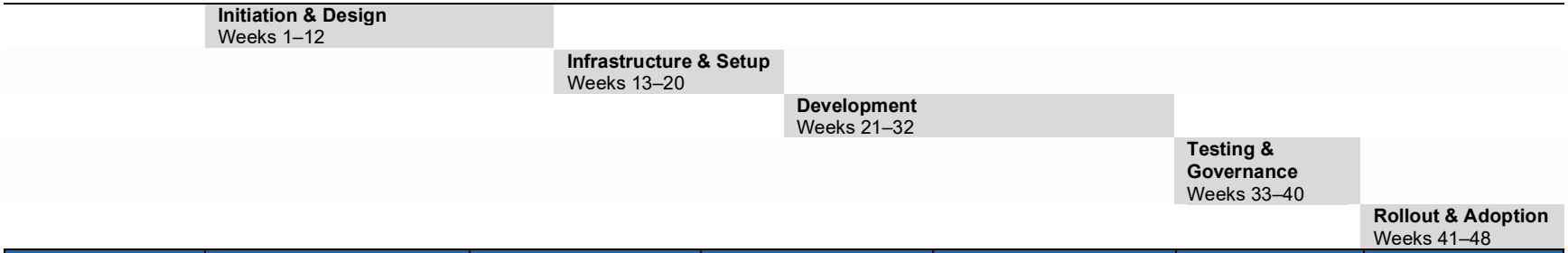
Cross Service Features

Features across the service areas include the following:

- Support for over 15 external data sources and over 10 Massachusetts-specific datasets
- Integration of over 12 synthetic data tools
- Sub 2-second search response for over 1,000 datasets
- Comprehensive security and privacy controls
- Mobile-responsive web interface with extensive filtering capabilities
- Automated testing and deployment pipelines
- Training and enablement.

Table 1 shows the proposed 48-week timeline for designing and deploying the DCC. Our plan organizes your eight required services from RFP Section 2 (left column) into the five phases envisioned in the DCC Requirements document, Section 3. The draft AWS Statement of Work document is included with our response, with more information about project assumptions, customer responsibilities, and applicable terms.

Table 1. AWS Proposed Timeline for DCC Development



DCC Services	Week 1–8	Week 9–16	Week 17–24	Week 25–32	Week 33–40	Week 41–48
AWS Foundations	AWS Account & Network Setup using AWS Landing Zone Accelerator Solution (Weeks 1–4) → Security Foundation (Weeks 3–7)	Security Foundation → Monitoring & Operational Excellence (Weeks 6–10)				
Service 1: Program Management & Coordination	Integrated DCC Project Plan Development (Weeks 1–4) → Stakeholder Management & Regular Meetings	Stakeholder Management & Regular Meetings	Milestone Management & Delivery Assurance	Milestone Management & Delivery Assurance	Milestone Management & Delivery Assurance	Milestone Management & Delivery Assurance → Project Closure
Service 2: Technical Architecture & Platform Development	Data Commons Website & Backend Infrastructure Design (Weeks 5–8) → Metadata Management Implementation (Weeks 7–12)	Metadata Management → Role-Based Access and Identity Management System Development (Weeks 10–16)	Web Portal Development (Weeks 17–24) → Central Ledger for Commons Credits Development (Weeks 19–26)	Central Ledger → API-Based Data Access and Usage Analytics Implementation (Weeks 23–32)		

Initiation & Design
Weeks 1–12

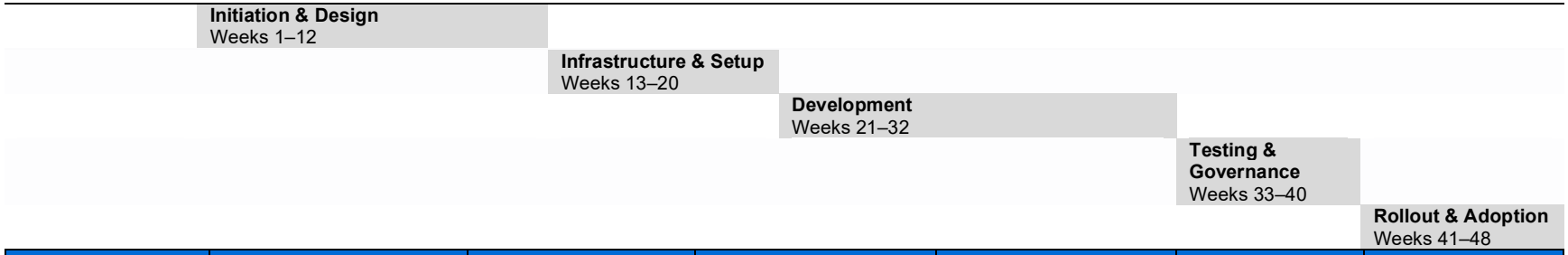
Infrastructure & Setup
Weeks 13–20

Development
Weeks 21–32

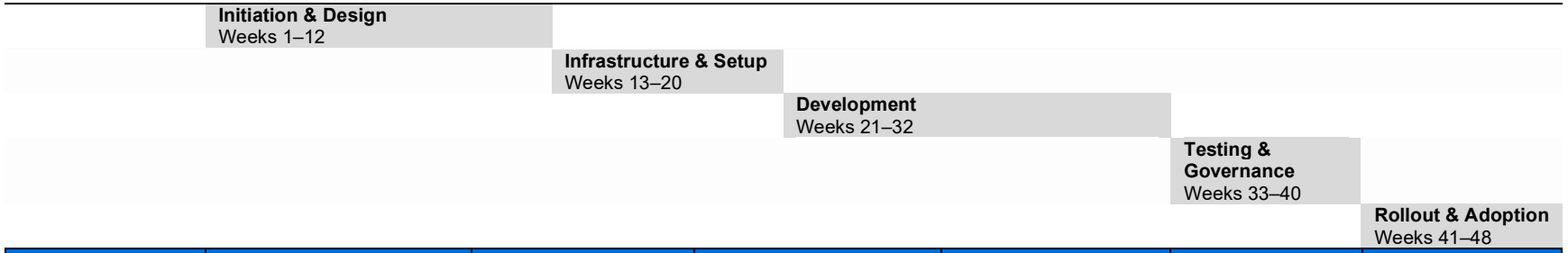
Testing & Governance
Weeks 33–40

Rollout & Adoption
Weeks 41–48

DCC Services	Week 1–8	Week 9–16	Week 17–24	Week 25–32	Week 33–40	Week 41–48
Service 3: Dataset Curation and Integration	Detailed Data Lake Design & Initial Dataset Curation Assistance (Weeks 7–10)	Initial Dataset Curation → Metadata Completeness and FAIR Data Principles Assurance (Weeks 11–16)	FAIR Data Principles → Ingestion Pipelines, Version Control, and Provenance Tagging Support (Weeks 17–24)			
Service 4 Synthetic Data Capability			Synthetic Data Tools Integration (Weeks 21–26) → Synthetic Dataset Generation and Validation Pipelines Support (Weeks 25–30)	Synthetic Dataset Generation → Privacy and Audit Policy Compliance Assurance (Weeks 29–34)		



DCC Services	Week 1–8	Week 9–16	Week 17–24	Week 25–32	Week 33–40	Week 41–48
Service 5 AI Fairness and Bias Framework			Bias Detection, Auditing, and Mitigation Tools Implementation (Weeks 23–28) → Bias Impact Documentation Workflows and Dashboards Establishment (Weeks 27–32)	Bias Impact Documentation Workflows and Dashboards Establishment (Weeks 27–32)		
Service 6 Security, Governance & Compliance	Terms of Use Definition and Ethical Data Handling Enforcement (Weeks 9–12)	RBAC, MFA, and Dataset Tiering Definition and Implementation (Weeks 13–18)	Logging, Encryption, and Audit Trails Assurance (Weeks 19–24)	Logging, Encryption, and Audit Trails Assurance → Terms of Use and Ethical Data Handling Enforcement (Weeks 25–32)	Compliance Validation (Weeks 33–36)	
Service 7 Testing, Rollout, and Adoption			Quality Assurance Planning & Framework (Weeks 25–28)	Quality Assurance Across Platform Functions → End User and Administrator Training (Weeks 27–34)	End User Training → Documentation and Support Materials Preparation (Weeks 33–38)	Documentation Preparation → Public Launch Support (Weeks 39–48)



DCC Services	Week 1–8	Week 9–16	Week 17–24	Week 25–32	Week 33–40	Week 41–48
Service 8 Deliverables	Detailed Project Plan and Timeline → Detailed Platform Architecture Documentation (Weeks 1–8)	Platform Architecture Documentation → Initial Data Catalog and Metadata System (Weeks 9–16)	Initial Data Catalog → Synthetic Data Tooling and Sample Outputs (Weeks 17–24)	Synthetic Data Tooling → Fairness and Bias Reporting Dashboard (Weeks 25–32)	Security and Governance Implementation → Training and Launch Materials (Weeks 33–40)	Sample Commons Credits Ledger Output → Explanation of Planned Industry Engagement → Pilot User Feedback (Weeks 41–48)

RFP Sec 3.1.b (bullet 2, 2nd sub-bullet) Respondents are invited to propose alternative(s) which provide substantially better or more cost-effective performance than achievable under the stated RFP scope of services.

MassTech's "Data Commons Collaborative RFP Questions and Answers" states a preference to launch "a hybrid model using MGHPCC/AICR for hosted data and compute, paired with cloud-based services for catalog, APIs, and web access." We recommend implementing the DCC entirely on AWS, with the ability to integrate with on-premises or other third-party data sources.

Recommending a Cloud-Native Approach for the DCC

AWS can deploy hybrid solutions. However, our experience deploying similar data platforms has shown that a cloud-native approach drives better performance and value for researchers and data scientists. This approach can also change the complexities and constraints common to hybrid implementations into opportunities for innovation and reliable access to critical research data.

Eliminating Scalability Challenges and Resource Constraints

In hybrid environments using on-premises resources, you must plan complex capacity and endure lengthy procurement cycles when you scale resources to meet unpredictable AI workload demand. This often means users over-provision or under-utilize resources. When demand spikes because multiple research teams simultaneously train large models, hybrid systems struggle to allocate additional resources quickly. Jobs queue up and research outcomes get delayed. In contrast, our cloud-native services can automatically scale up or down based on actual usage. Researchers have the computing power they need when they need it but only pay for the resources they use.

Streamlining Operations and Security Management

A unified AWS solution can streamline DCC operations by eliminating complex connections between on-premises and cloud environments. In hybrid deployments, teams often spend significant time troubleshooting connectivity issues and maintaining consistent security policies across different environments. AWS can deliver a comprehensive framework that gives MassTech unified control and visibility rather than managing multiple security protocols and governance tools. For example, administrators can monitor and manage the entire AWS infrastructure through a single interface instead of correlating security logs from separate systems.

Accelerating Innovation with Immediate Access to Advanced Services

A cloud-based system also provides immediate access to AWS's growing suite of AI/ML services by eliminating infrastructure barriers and providing on-demand scaling. DCC users will regularly benefit from new AWS capabilities without the hardware constraints typical in hybrid environments. On-premises infrastructure may not keep pace with evolving AI computing needs (particularly for GPU-intensive workloads). However, AWS users can instantly use the latest hardware innovations. When new AI capabilities are released, such as more powerful instance types for training LLMs, DCC users can immediately begin using them without waiting for hardware upgrades or procurement cycles.

Building A Foundation for Future Growth

Our proposed approach can provide the agile, secure, and cost-effective foundation needed to support the Commonwealth's growing research and AI community, while avoiding the

operational complexities and performance limitations inherent in hybrid architectures. This will help MassTech focus on innovation and adoption rather than managing infrastructure integration challenges.

RFP Sec 3.1.b (bullet 2, 3rd sub-bullet) Resumes or bios of key personnel that will be performing the Services.

AWS brings rigor to staffing MassTech's project through our comprehensive talent management system, guided by Amazon's Leadership Principle of "Think Big." We select team members who can both envision modern long-term possibilities and execute precise, incremental steps toward those goals. We maintain a curated pool of certified experts, each vetted through AWS's stringent technical certification programs and specialized assessments across AI, data science, cloud architecture, and program management disciplines.

Our staffing process identifies professionals with deep experience in AI data commons implementations and public sector initiatives who can balance innovation with practical execution. For MassTech's project, we will provide staff with expertise in collaborative research platforms, data governance, and secure infrastructure. The following leaders represent examples of the qualified professionals we can deploy for your engagement.

Keerthi Priya Maryada

Delivery Practice Manager and Lead Data Architect

Keerthi Maryada specializes in empowering public sector organizations through data-driven digital modernization. With over 18 years of experience in consulting and professional services, she leads the delivery of complex cloud initiatives, focusing on education and state and local governments. Keerthi manages the ProServe U.S. EDU/SLG practice, delivering projects with measurable business outcomes, while maintaining compliance with strict regulatory requirements. Her deep expertise in data architecture and analytics has helped numerous organizations unlock the value of their data assets while modernizing their technology infrastructure.

Contributions

- Orchestrated large-scale cloud migrations for public sector clients, successfully transitioning critical workloads to AWS while facilitating continuous operations
- Developed innovative data analytics solutions for evidence-based decision-making in state and local government operations
- Implemented AI/ML solutions that updated public service delivery and citizen engagement across multiple government agencies
- Led and mentored high-performing teams, driving excellence in project delivery while fostering a culture of innovation

Skills and Expertise

- Data and analytics architecture for public sector digital modernization
- AI/ML implementation in government and education sectors
- Cloud migration strategy and execution
- Public sector compliance and security frameworks
- Team leadership and delivery excellence in complex environments

Amy Tipple

Senior Data Scientist

Amy Tipple is an AI/ML leader with over 13 years of relevant professional experience. She has led several initiatives, including developing an agentic chatbot for NIH and a geospatial computer vision project for landmine detection in conflict zones. Her technical expertise spans multiple domains, including developing ML models for drone-based detection, building analytic systems for Stop Soldier Suicide, and creating intelligent document processing systems for organizations like Blackbaud.org.

Contributions

- Scopes customer projects, including level of effort and timeline estimations
- Leads solution design, AI/ML model development, infrastructure development, and code reviews
- Engages with technical and executive audiences to guide decision-making
- Demonstrates proofs-of-concept to showcase potential solutions

Skills and Expertise

- LLMs, computer vision, and generative AI
- Multimodal foundation models and graph neural networks
- Reinforcement learning and recommender systems
- Scalable and efficient data processing solutions

Dhiman Roy

Senior Engagement Manager

Dhiman Roy is a senior technology and business cloud program leader with a proven track record of driving technology adoption and leading large-scale strategic solutions. As a trusted advisor, Dhiman guides customer design and builds for modern cloud-native solutions to meet long term strategic goals.

Contributions

- Led multi-year, multi-million dollar digital and cloud modernization initiative, delivering innovative next-gen solutions to drive lasting impact for state government
- Led a 21-month project to build a Learning Management and Digital Curriculum platform
- Orchestrates short and long-term vision and strategy for customers through collaboration with AWS, customer leadership, and third-party providers
- Uses Agile methodology and sprint-driven frameworks to continuously prioritize customer deliverables for successful project execution

Skills and Expertise

- AWS Certified Solutions Architect and AI Practitioner
- Program management, agile project management, change management
- Budget management, contract negotiations, financial analysis and risk management
- IT operations cost optimization, global IT operations, global operations management

Martin McGreal

Technical Architect

Martin McGreal works with customers to deliver reliable and flexible solutions in the cloud, develop long and short-term technology strategies, and hone product-market fit. He leads teams of AWS Cloud consultants, along with AWS Partners and customer technologists, in large or small-scale endeavors to achieve their desired business outcomes.

Contributions

- Led a team of architects, engineers, and Partners in designing and building cloud-native data and integration services for higher education marketing, admissions, learning, and advising systems
- Developed a “data value chain” methodology and technical architecture to guide students, develop early intervention strategies, and understand student success metrics
- Built an API and integration strategy to serve 16 university and colleges in the State of North Carolina

Skills and Expertise

- Cloud computing, distributed systems, application architecture, SaaS architecture, modern data architecture, API development, DevOps, resiliency
- Enterprise architecture, software engineering management, and product management

RFP Sec 3.1.b (bullet 2, 4th sub-bullet) Provide the total not-to-exceed costs for providing the Services based on projected hours, proposed hourly rates, as well as any other appropriate costs, by program phase in the Budget Template (Attachment C). List additional fees, overhead charges, or reimbursable expenses, if any.

See the *AWS Services Budget Template* workbook included with our response.

RFP Sec 3.1.b (bullet 2, 5th sub-bullet) Three examples of work previously performed by the Respondent that are substantially similar to the Services.

Customer: Allen Institute

Relevance to MassTech

The Massachusetts AI Hub's DCC aims to revolutionize life sciences research by creating a unified platform for data sharing and analysis across the Commonwealth. Like the Allen Institute's successful implementation of cloud and AI solutions in neuroscience, the DCC can give researchers centralized access to cutting-edge analytical tools and vast datasets. This collaborative approach has the potential to accelerate critical medical discoveries, mirroring the impact of the Allen Institute's Brain Knowledge Platform.

Context and Challenge

The human brain contains over 100 billion cells that form complex networks. This complexity has challenged researchers who seek treatments for neurological conditions like Alzheimer's and Parkinson's disease. Traditional research methods have struggled to process and analyze the massive amounts of data that brain studies generate. This leaves scientists faced with the daunting task of combining different datasets from various sources while maintaining the precision required for productive research.

Solution

With cloud technology from AWS, the Allen Institute is leading a global network of neuroscience researchers to study the brain at cellular resolution and unlock new insights. AWS modernized the Allen Institute's brain research capabilities with a new cloud platform that combines powerful computing and advanced AI/ML tools. Researchers now process and analyze data at unprecedented scale, uncovering new patterns. The solution's open-source architecture makes these discoveries accessible to scientists worldwide, while its generative AI capabilities integrate diverse data sources to reveal connections previously hidden in complex neurological information.

> "AWS is helping us bring the global neuroscience community together, furthering our mission around open science."
>
> *—Shoaib Mufti, Data and Technology Lead, Allen Institute for Brain Science*

Impact

Cloud computing allows researchers at the Allen Institute to map and understand the diversity of brain cells. Through AWS technology, neuroscientists worldwide now collaborate to study the brain at cellular resolution, advancing discoveries that could transform treatment for neurological diseases and mental health conditions. AWS high-performance computing and AI/ML convert complex brain data into clear insights that accelerate medical breakthroughs for patients.

The Allen Institute's Brain Knowledge Platform, built on AWS, is an open-source collection of brain cell data. This breakthrough helps scientists examine the brain's cellular structure with precision while fostering global research partnerships. By turning brain data into actionable discoveries, the solution speeds the development of new treatments that could improve life for millions of Americans affected by brain diseases.

Allen Institute Contact Information	
Contact Name	Shoaib Mufti, M.S.
Contact Title	Sr. Director, Data and Technology
Email	Shoaibm@alleninstitute.org
Phone	(603) 459-9318
Additional Information	Email Mr. Mufti first to schedule a phone call

Customer: Santa Clara County Public Health Department

Relevance to MassTech

The Santa Clara County Public Health Department's successful implementation of a unified data platform offers a blueprint for the Massachusetts AI Hub's DCC. MassTech faces complexity in coordinating data across various sectors, much like Santa Clara County's challenge of fragmented data across partner agencies. Santa Clara's achievement in migrating siloed health data into an integrated, AI-ready platform demonstrates the potential impact of the DCC initiative.

Context and Challenge

AWS collaborated with the Santa Clara County Public Health Department to create a collaborative public health data platform. The County serves over 2 million people and works with 70 partner agencies across 15 cities. The main challenge was that epidemiologists and data scientists dealt with siloed and fragmented data, spending a lot of time processing and unifying data instead of analyzing it and gaining meaningful insights. As a result, health officials made decisions using structured and unstructured data.

Solution

The solution modernizes how Santa Clara County protects public health by building a comprehensive data platform on AWS. This scalable, secure data lake gives health professionals the validated information they need to serve their communities.

The solution tackles critical challenges through four capabilities:

- **Massive Data Integration**: Connects 15 public health data sources to create a fuller picture of community health.
- **Intelligent Data Pipelines**: ETL processes move information through cloud-based endpoints, transforming raw data into actionable insights.
- **Three-Layer Processing System**: Data flows through validation and standardization in the ingestion layer, applies business rules in the curation layer, then optimizes for analysis in the distribution layer.

150+
Ingestion views

300+
Curation and distribution tables available for analysis

50 M+
Records processed across data sources on daily/weekly schedule in under 50 minutes

- **Proven Technology Stack**: AWS Glue, Amazon S3, Aurora PostgreSQL, and open-source tools like Data Build Tool work together to deliver reliable results.

Impact

Santa Clara County modernized their public health operations with a data platform that delivered powerful results such as:

- **Streamlined Analysis**: Epidemiologists and health officers now spend their time analyzing trends and making decisions instead of wrestling with data, leading to faster responses that improve outcomes
- **Reliable Data**: Identity management across six data sources eliminates duplicate records and creates a single, accurate profile for all users, which is critical for tracking health outcomes and interventions
- **Advanced Document Processing**: Amazon Textract captures data from PDF and handwritten forms, transforming previously inaccessible information into actionable intelligence

Santa Clara County Public Health Department Contact Information	
Contact Name	Wayne Enanoria
Contact Title	Chief Science Officer and Science Branch Director
Email	wayne.enanoria@phd.sccgov.org
Phone	(408) 816-9534
Additional Information	Email questions in advance to help steer the reference conversation

Customer: Maryland Total Human Information Network

Relevance to MassTech

The story of Maryland Total Human Information Network's (MD THINK) platform offers a compelling roadmap as MassTech looks to modernize your technology infrastructure. Maryland's MD THINK initiative demonstrates how a state can use cloud technology to modernize its social services delivery.

Context and Challenge

MD THINK emerged from the Maryland Department of Human Services' (MD DHS) need to modernize and integrate social services across 24 local agencies serving 23 counties and Baltimore City. The department needed to establish a framework for application migration, create a unified data repository that could be shared across multiple state departments, and break down the silos between agencies that were hampering effective service delivery. The existing infrastructure made it difficult for caseworkers to access real-time information in the field, and the lack of integration between agencies meant duplicated efforts and inefficient service delivery to vulnerable citizens. These challenges demanded a comprehensive, secure, and scalable solution that could transform how social services were delivered across the state.

Solution

Following an evaluation of various cloud options, MD DHS chose to build the platform using AWS. Working with technology Partner Deloitte Consulting, MD DHS designed and launched the MD THINK platform in six months, and the first application on the platform was live within nine months of receiving the authority to operate. MD THINK now integrates numerous social service applications administered by state agencies, including the Department of Human Resources, Department of Health and Mental Hygiene, Department of Juvenile Services, and Department of Labor, Licensing, and Regulation. As agencies need to migrate or build new applications, MD THINK provides a secure, FedRAMP compliant, cost-effective platform that supports cross-agency collaboration.

> "AWS is far ahead of everyone else in the cloud space, from a functionality, security, and cost perspective—so the decision was easy."
>
> *—John Evans, Maryland's Chief Information Security Officer*

Impact

MD THINK modernized Maryland's social services by putting residents first. Social workers now update case information right from their mobile devices while meeting with families, giving them more time to focus on meaningful support. The unified platform brings together data that was once scattered across agencies, so people tell their story once and receive coordinated care. By consolidating multiple systems into one cloud-based solution, Maryland reduced costs while gaining the flexibility to scale services as needs change. Most importantly, agencies can now collaborate to deliver responsive, personalized support. This modern foundation opens new possibilities for digital innovation across Maryland's government services, directly benefiting the people who depend on them.

MD THINK Contact Information	
Contact Name	This customer asks that our account manager coordinate reference calls. Contact Jared Ripps (details below) to facilitate this conversation.
Contact Title	Principal AWS ProServe Account Executive
Email	rippsj@amazon.com
Phone	(470) 725-8997

RFP Sec 3.1.b (bullet 2, 6th sub-bullet) Respondent's W-9

Docusign Envelope ID: 21C0E39F-B230-4D36-AB8B-8161D4385304

Form **W-9**
(Rev. March 2024)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Go to *www.irs.gov/FormW9* for instructions and the latest information.

Give form to the requester. Do not send to the IRS.

Before you begin. For guidance related to the purpose of Form W-9, see *Purpose of Form*, below.

Print or type. See Specific Instructions on page 3.

1 Name of entity/individual. An entry is required. (For a sole proprietor or disregarded entity, enter the owner's name on line 1, and enter the business/disregarded entity's name on line 2.)

AMAZON WEB SERVICES, INC.

2 Business name/disregarded entity name, if different from above.

3a Check the appropriate box for federal tax classification of the entity/individual whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor ☑ C corporation ☐ S corporation ☐ Partnership ☐ Trust/estate

☐ LLC. Enter the tax classification (C = C corporation, S = S corporation, P = Partnership) . . . . .

Note: Check the "LLC" box above and, in the entry space, enter the appropriate code (C, S, or P) for the tax classification of the LLC, unless it is a disregarded entity. A disregarded entity should instead check the appropriate box for the tax classification of its owner.

☐ Other (see instructions)

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) 5

Exemption from Foreign Account Tax Compliance Act (FATCA) reporting code (if any) E

(Applies to accounts maintained outside the United States.)

3b If on line 3a you checked "Partnership" or "Trust/estate," or checked "LLC" and entered "P" as its tax classification, and you are providing this form to a partnership, trust, or estate in which you have an ownership interest, check this box if you have any foreign partners, owners, or beneficiaries. See instructions . . . . . ☐

5 Address (number, street, and apt. or suite no.). See instructions.

PO BOX 81207

Requester's name and address (optional)

6 City, state, and ZIP code

SEATTLE, WA 98108-1207

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. See also *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number: ___ - ___ - ____

or

Employer identification number: 20 - 4938068

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and, generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here **Signature of U.S. person** DocuSigned by: Michael Herman **Date** 1/8/2025

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9*.

What's New

Line 3a has been modified to clarify how a disregarded entity completes this line. An LLC that is a disregarded entity should check the appropriate box for the tax classification of its owner. Otherwise, it should check the "LLC" box and enter its appropriate tax classification.

New line 3b has been added to this form. A flow-through entity is required to complete this line to indicate that it has direct or indirect foreign partners, owners, or beneficiaries when it provides the Form W-9 to another flow-through entity in which it has an ownership interest. This change is intended to provide a flow-through entity with information regarding the status of its indirect foreign partners, owners, or beneficiaries, so that it can satisfy any applicable reporting requirements. For example, a partnership that has any indirect foreign partners may be required to complete Schedules K-2 and K-3. See the Partnership Instructions for Schedules K-2 and K-3 (Form 1065).

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS is giving you this form because they

Cat. No. 10231X Form **W-9** (Rev. 3-2024)

4 Attachment B

RFP Sec 3.1.b (bullet 2, 7th sub-bullet)

Massachusetts Technology Collaborative Authorized Respondent's Signature and Acceptance Form

The undersigned is a duly authorized representative of the Respondent listed below. The Respondent has read and understands the RFP requirements. The Respondent acknowledges ~~that all of the terms and~~ the technical requirements and general conditions of the RFP are mandatory, and that Respondent's response is compliant with such requirements.

The Respondent understands that, if selected by the Mass Tech Collaborative, the Respondent and the Mass Tech Collaborative will execute an Agreement specifying the mutual requirements of participation.

Respondent agrees that the entire bid response will remain valid for sixty (60) days from receipt by the Mass Tech Collaborative.

I certify that Respondent is in compliance with all corporate filing requirements and State tax laws.

I certify that the statements made in this response to the RFP, including all attachments and exhibits, are true and correct to the best of my knowledge.

I acknowledge and understand the procedures for handling confidential materials submitted to the Mass Tech Collaborative as set forth in Section 3.1(d); I agree to be bound by those procedures and agree that unless otherwise provided by Massachusetts Public Records Law, the Mass Tech Collaborative shall not be liable under any circumstances for the disclosure of any materials submitted in response to the Mass Tech Collaborative ~~pursuant to this~~ RFP ~~or upon the Respondent's selection~~.

Respondent:

Amazon Web Services, Inc.

By: DocuSigned by: Shannon Lowther
(Signature of Authorized Representative)

Name: Shannon Lowther

Title: Authorized Representative

Date: Sep-29-2025

AWS Professional Services – Statement of Work

"Customer"	Massachusetts Technology Collaborative
"AWS"	Amazon Web Services, Inc.
Project Name	AI Hub Data Commons Collaborative Consulting Services
"Project Location"	Remote / Westborough, MA United States of America
Customer's Engagement Contact Name and Email Address	Sabrina Mansur proposals@masstech.org
Customer's Accounts Payable / Bill To / Name and Email Address	Sabrina Mansur mansur@masstech.org
Customer's Bill-To Mailing Address	75 North Drive Westborough, MA 01581 United States of America
Customer's Bill-To Phone Number	TBD
Customer's AWS Billing Account ID	000000000000
Currency	U.S. dollars ($)

DRAFT

This Statement of Work for AWS Professional Services (this "**SOW**") is entered into between AWS and Customer. This SOW is subject to the terms of the AWS Customer Agreement (available at http://aws.amazon.com/agreement) or other written agreement, by and between Customer and the relevant AWS Contracting Party (identified as a party to the agreement), governing Customer's use of the Services (the "**Agreement**"). This SOW is effective as of the date the last party signs this SOW (the "**SOW Effective Date**"). Capitalized terms not defined in this SOW may be defined in the Agreement.

Scope of the AWS Professional Services

AWS will provide the consulting and advisory services described below, for up to the total number of hours set forth in this SOW.

AWS will advise and assist Customer with the development and delivery of the Data Commons Collaborative (DCC), including the following service areas in Customer's non-production environment:

AWS Foundations

AWS Landing Zone Accelerator Deployment

- Deploy AWS Landing Zone Accelerator solution
- Implement multi-account strategy using AWS Organizations (Organization)
- Configure organizational unit (OU) structure and AWS accounts
- Establish cross-region and high availability design
- Create automated, operational, and secure environment

Network and Security Foundation

- Configure network routes for internet, inter-account, and hybrid connectivity
- Implement AWS Transit Gateway (Transit Gateway) for multi-account network design with proper routing between accounts and on-premises
- Setup Domain Name Service (DNS) for name resolution and routing
- Deploy AWS IAM Identity Center with customer identity provider integration for centralized access management
- Implement AWS Config Rules or automated detective and preventative guardrails
- Establish AWS Key Management Service (AWS KMS) encryption keys and AWS Secrets Manager (Secrets Manager) for minimum security baseline (MSB)
- Configure AWS CloudTrail (CloudTrail), Amazon CloudWatch (CloudWatch), and AWS X-Ray (X-Ray) for foundational monitoring and logging
- Deploy detective and preventative guardrail rules
- Integrate with existing identity provider solutions

Monitoring and Operational Excellence

- Deploy comprehensive monitoring and logging infrastructure
- Implement cost monitoring and potential optimization strategies
- Create operational runbooks and procedures
- Configure automated backup and retention policies

Program Management and Coordination

- Work with Customer to define and maintain a mutually agreed upon integrated project plan and timeline
- Conduct regular meetings including Customer stakeholder updates

Website Technical Architecture and Platform Development

AWS will advise and assist Customer with the following activities in Customer's non-production environment:

- Design and build data commons website and backend infrastructure with metadata management, cataloging, and discovery tools
- Implement role-based access/identity management system and Commons Credits transaction system
- Develop Application Program Interface (API) -based data access and usage analytics

DRAFT

- Create user-friendly website interface with searchable and filterable dataset directory and detailed metadata pages
- Enable Customer to be able to link external datasets and community dataset submissions
- Build admin dashboard for dataset and user management
- Implement data hosting with metadata standards and API and export tools
- Develop centralized Commons Credits Transaction System with:
    - Credit earning mechanisms
    - Premium access spending capabilities
    - Resource usage incentives
    - Credits management interface
- Curate initial datasets to be ingested and implement ingestion pipelines with version control and provenance tagging
- Deploy metadata management system supporting descriptive and technical metadata with FAIR principles compliance
- Implement dataset discovery, search, and role-based access controls
- Enable Customer to be able to publish, version, and integrate with external systems
- Deploy usage tracking, collaboration features, and data exploration tools
- Support industry-standard file formats (CSV, JSON, Parquet, GeoJSON), metadata standards (Dublin Core, Schema.org, DCAT), and integration standards (DOIs, DataCite)

Synthetic Data Capability

AWS will advise and assist Customer with the following activities in Customer's non-production environment:

- Integrate agreed-upon synthetic data tools with support for diverse data types
- Implement synthetic dataset generation and validation pipelines including:
    - Automated data profiling and quality assessment
    - De-identification and privacy risk scoring
    - Configurable synthesis parameters
    - Dataset traceability and metadata tagging
    - Scalable compute infrastructure deployment
    - Privacy and compliance policy enforcement

AI Fairness and Bias Framework

AWS will advise and assist Customer with the following activities in Customer's non-production environment:

- Implement AI fairness tools for dataset auditing, bias detection, and mitigation
- Deploy model fairness evaluation and ethical oversight systems
- Establish automated reporting, stakeholder engagement, and transparency features
- Develop user-friendly dashboards (up to 10) and educational resources for AI fairness

Security, Governance & Compliance

AWS will advise and assist Customer with the following activities in Customer's non-production environment:

- Implement Role-Based Access Control system (RBAC), Multi-Factor Authentication (MFA), and dataset tiering
- Deploy Single-Sign-On (SSO), logging, encryption, and audit systems

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- Define dataset permissions and terms of use of data available through the data commons portal
- Integrate security monitoring and conduct reviews
- Establish hybrid governance model with consent mechanisms

Testing, Rollout, and Adoption

AWS will advise and assist Customer with the following activities in Customer's non-production environment:

- Assist Customer to conduct quality assessment (QA) across Customer's existing environment functions
- Conduct knowledge transfer and advise Customer on AWS general best practices to for Customer's end users and administrators
- Prepare documentation and support materials

Deliverables

AWS will provide the following deliverables to Customer during the engagement ("**Deliverables**"):

- Documents:
  - Documented detailed project plan and timeline
  - Documented detailed platform architecture
  - Training and Launch Materials
- Technical Solutions:
  - Initial Data Catalog and Metadata System
  - Synthetic Data Tooling and Sample Outputs
  - Fairness and Bias Reporting Dashboard
  - Security and Governance Implementation
  - Sample Commons Credits Transaction System output
  - Pilot user feedback

Assumptions

1. Customer will provide timely access to stakeholders for requirements validation and decision-making
2. Customer has or will establish AWS accounts with appropriate permissions for the project team
3. Existing datasets identified in the RFP are available and can be accessed with appropriate permissions
4. Customer will provide domain experts to assist with dataset curation and validation
5. The project will follow an agile development methodology with regular sprints and reviews
6. Customer has or will establish identity management systems that can be integrated with the DCC
7. Legal frameworks for data sharing and usage are established or will be provided by Customer
8. The scope does not include production-level inference and model scoring environments.
9. Customer will provide access to Massachusetts-specific datasets or facilitate connections with relevant agencies.

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10. Third-party synthetic data tools mentioned in the RFP can be integrated with AWS services.
11. Customer has appropriate licensing for any commercial software required.
12. Network connectivity between Customer facilities and AWS regions is adequate for data transfer needs.
13. Customer will provide branding guidelines and design requirements for the user interface.
14. Customer will provide accessibility standards documentation for compliance.
15. Integration with 25+ external data sources is technically feasible.
16. Synthetic data tools have available APIs or integration capabilities.
17. FAIR data principles implementation is acceptable to all data providers.
18. Data modeling for the DCC is out of scope for this engagement

Customer Responsibilities

AWS's ability to deliver the AWS Professional Services depends on Customer's reasonable and timely cooperation and the accuracy and completeness of any information from Customer. Customer will provide all necessary support to successfully deliver on the Scope of AWS Professional Services described above ("Project") and keep Project on schedule, within budget, and within scope, including:

1. Customer will provide support and approval from its business stakeholders, application owners, IT infrastructure team, and security as well as any necessary exceptions to standard processes to execute on the Project.

2. Active participation of Customer subject matter experts and full-time staffing of Customer employees, contractors, and third parties necessary to successfully execute on the Project.

3. Customer will establish and make available a communication plan and escalation path to quickly resolve risks and issues in connection with this Project

4. Customer will make available on a timely basis such Customer staff who will support AWS in the execution of the tasks described in this SOW.

5. Customer will provide feedback to AWS in a timely manner to allow the Project to proceed in accordance with any agreed timelines. AWS's compliance with the estimated timelines stated under this SOW is dependent on Customer's timely co-operation under this SOW.

6. Customer will be responsible for the implementation and operation of the solutions.

7. Customer is solely responsible for all activities in its production environments where software, applications, code, or other products are placed into live operation for their intended use by internal or external end users, including:
   i. Deploying into, operating and maintaining production environments;
   ii. Ensuring AWS consultants are not provided access to production environments; and
   iii. Evaluating whether deliverables are ready for deployment and assessing all modifications to Customer's production environments.

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8. Customer will own and manage all aspects of Customer's production environments including, but not limited to, AWS accounts, pipelines, deployment gates, logs and records, and access controls.

Schedule of Rates

AWS will invoice Customer in hourly increments for AWS Professional Services delivered on a "time and materials" basis. The rates for consultants are expressed below as hourly rates. The aggregate charges for work performed under this SOW will not exceed the estimated total below, without the prior written authorization of the parties. The rates provided are valid for the initial term of this SOW. Any SOW Amendments that add new scope or extend the term of this SOW beyond 12 months will be subject to the applicable rates at the time such Amendment is executed.

The currency for Schedule of Rates and Expenses is U.S. dollars ($)

Consultant Level/Role	*Hourly Rate* *	*Number of Hours**	*Cost**
Billable Engagement:			
Delivery Practice Manager (DPM)			
Engagement Manager (EM)			
Data Architect / Data Tech Lead			
Cloud Infrastructure Architect (CIA)			
Data Engineer1			
Data Engineer2			
Machine Learning Engineer			
Security/AI Ethics Specialist			
Security Consultant			
Training Consultant			
Delivery Lead - Global Competency Center			
Cloud Application Architect (CAA) – Global Competency Center			
DevOps Consultant – Global Competency Center			
UX/UI Lead – Global Competency Center			
UI/Front end Developer1 – Global Competency Center			
UI Backend Developer – Global Competency Center			
QA – Global Competency Center			
Total			

* The resource hours, rates, and associated costs are included in the *AWS Services Budget Template* submitted with the AWS RFP response. Please refer to the Excel workbook for that information.

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Engagement Related Expenses

At this time, AWS does not anticipate incurring any travel expenses with this Engagement. However, if Customer approves any travel expenses in writing (which may be provided by email), AWS will bill Customer for approved expenses to the extent they were incurred by AWS.

Additional Terms

1. AWS Professional Services may be provided on-site at the Project Location, remotely or at such other locations as may be mutually agreed.
2. AWS will provide the AWS Professional Services using skilled and experienced consultants and will perform such services in a professional manner. If AWS fails to do so then, as Customer's sole remedy, AWS will re-perform the relevant AWS Professional Services or refund the charges for such service; provided that Customer notifies AWS of the failure within one month of the date of performance.
3. From time to time, AWS may engage a subcontractor to perform any Professional Services under this SOW, provided that AWS will (a) impose appropriate contractual obligations upon such contractor and (b) remain responsible to Customer for all duties and obligations under this SOW.
4. Customer consents to receiving invoices via email. The parties may mutually agree via email to increase the number of consultant days and expenses one time under this SOW.
5. Customer will provide AWS with access to personnel, documentation, equipment, source code, data, systems, and facilities as reasonably required by AWS to perform this SOW.
6. This SOW automatically terminates 12 months after the SOW Effective Date. Customer may terminate this SOW for any reason by providing AWS with at least two weeks' written notice (the "Notice Period"), provided that Customer will pay for all fees and charges for the AWS Professional Services already performed, in-progress, and scheduled to occur during the Notice Period, as well as any and all expenses incurred during the Notice Period.
7. These Professional Services relate to Customer's current use of AWS cloud services and are not provided in furtherance of any forthcoming competitive procurement/solicitation.
8. Customer certifies that, as applicable, it has confirmed with an appropriate ethics official that there are no federal, state, local or institutional ethics or procurement laws, regulations, or other rules that would restrict or prohibit its receipt of any discounted services provided under this SOW.
9. Customer will create and maintain backup copies of all systems and sensitive or otherwise valuable content before, during and after delivery of the AWS Professional Services. Customer is responsible for any content loss in connection with its failure to back up its content.
10. Customer will provide AWS with all product licenses necessary for carrying out the AWS Professional Services described in this SOW, other than licenses provided pursuant to the Agreement.

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11. Content on the server images is migrated in the form that it resides on the server image, and AWS has no obligation to apply further protections, encryption settings or measures to such content.
12. AWS may assist Customer with calculating Customer's estimated total cost of ownership or value realization for AWS Services. The results are based on information provided by Customer. Monthly charges will be based on actual usage of AWS Services and may vary from estimates.
13. Compliance with applicable laws in relation to bribery and corruption is a matter of fundamental importance for Customer. AWS's Code of Business Conduct and Ethics posted (at the Effective Date) at https://ir.aboutamazon.com/corporate-governance/documents-and-charters/code-of-business-conduct-and-ethics/default.aspx prohibits the paying of bribes to anyone for any reason, whether in dealings with governments or the private sector. Each of the parties therefore agrees to act in accordance with all laws applicable to it relating to bribery, disclosure or crediting of discounts and rebates, gratuities, kickbacks, and corruption during the term of this SOW.
14. Customer will provide and secure engagement tools (e.g. Jira, Git Integration, Confluence, Draw.io, Bluescape, etc.) to support the Project and provide for communication, collaboration, and tracking to maintain engagement governance and ongoing Customer operations.
15. Customer will not disclose or provide AWS access to "personal data," "personally identifiable information," or any similar or equivalent concepts (each as defined in applicable data privacy laws).
16. Customer will not permit AWS to access to any of Customer's production environments where software, applications, code, or other products are placed into live operation for their intended use by internal or external end users.
17. This SOW may be executed in two or more counterparts, each of which will be deemed an original and all of which taken together will be deemed to constitute one and the same document. The parties may sign and deliver this SOW by facsimile or electronic transmission.

(SIGNATURES ON NEXT PAGE)

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Acceptance and authorization

IN WITNESS WHEREOF, the parties below have executed this SOW as of the SOW Effective Date.

AWS:	**CUSTOMER:**
Amazon Web Services, Inc.	**Commonwealth of Massachusetts**
DRAFT – NOT FOR SIGNATURE	DRAFT – NOT FOR SIGNATURE
Signature	Signature
Full name	Full name
Title	Title
Date	Date

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Massachusetts Technology Collaborative

Grant Agreement
Standard Budget and Invoice Template
Invoiced Costs

Line Number	Budgeting																			
2	Applicant Information																			
3	Applicant: Amazon Web Services, Inc.			Procurement No.: 2026-JAII-01																
4	Budget Period: 12/2/2025-11/2/2026			Title of Proposed Project:																
5	Address: 410 Terry Avenue North, Seattle, WA 98109			AI Hub Data Commons Collaborative Consulting Services																
6																				
7																				
8				MTC Funding Requested:																
9				Total Project Cost	$4,983,075															
10	Cost Elements			Total Project	Invoice 1			Invoice 2			Invoice 3			Invoice 4			Cumulative			
11					Period: MM/DD/YYYY-MM/DD/YYYY			Period: MM/DD/YYYY-MM/DD/YYYY			Period: MM/DD/YYYY-MM/DD/YYYY			Period: MM/DD/YYYY-MM/DD/YYYY			Period: MM/DD/YYYY-MM/DD/YYYY				
12							Amount			Amount			Amount			Amount	Expended		Remaining	
13	I. Direct Labor																			
14	*name/title*	*HRS*	*Rate*		*HRS*			*HRS*			*HRS*			*HRS*						
15	Delivery Practice Manager (DPM)	46	$394	$18,124		$	-		$	-		$	-		$	-	$	-	$	18,124
16	Engagement Manager (EM)	1930	$394	$760,420		$	-		$	-		$	-		$	-	$	-	$	760,420
17	Data Architect / Data Tech Lead	1930	$394	$760,420		$	-		$	-		$	-		$	-	$	-	$	760,420
18	Cloud Infrastructure Architect (CIA)	330	$302	$99,660		$	-		$	-		$	-		$	-	$	-	$	99,660
19	Data Engineer1	1400	$302	$422,800		$	-		$	-		$	-		$	-	$	-	$	422,800
20	Data Engineer2	360	$302	$108,720		$	-		$	-		$	-		$	-	$	-	$	108,720
21	Machine Learning Engineer	1040	$394	$409,760		$	-		$	-		$	-		$	-	$	-	$	409,760
22	Security/AI Ethics Specialist	640	$394	$252,160		$	-		$	-		$	-		$	-	$	-	$	252,160
23	Security Consultant	970	$394	$382,180		$	-		$	-		$	-		$	-	$	-	$	382,180
24	Training Consultant	560	$394	$220,640		$	-		$	-		$	-		$	-	$	-	$	220,640
25	Delivery Lead - Global Competency Center	970	$150	$145,752		$	-		$	-		$	-		$	-	$	-	$	145,752
26	Cloud Application Architect (CAA) – Global Competency Center	1360	$150	$204,354		$	-		$	-		$	-		$	-	$	-	$	204,354
27	DevOps Consultant – Global Competency Center	1680	$150	$252,437		$	-		$	-		$	-		$	-	$	-	$	252,437
28	UX/UI Lead – Global Competency Center	1601	$219	$350,619		$	-		$	-		$	-		$	-	$	-	$	350,619
29	UI/Front end Developer1 – Global Competency Center	1040	$150	$156,270		$	-		$	-		$	-		$	-	$	-	$	156,270
30	UI Backend Developer – Global Competency Center	360	$150	$54,094		$	-		$	-		$	-		$	-	$	-	$	54,094
31	QA – Global Competency Center	2560	$150	$384,666		$	-		$	-		$	-		$	-	$	-	$	384,666
21	Total Direct Labor			$4,983,075	0	$	-	0	$	-	0	$	-	0	$	-	$	-	$	4,983,075
22																				
23	II. Direct Labor Fringe Cost	Rate (%):		$0		$	-		$	-		$	-		$	-	$	-	$	-
24																				
25	II. Subcontractors/Consultants/Contracted Staffing																			
26	*Firm name/title or role/type of services to be provided*	*HRS*	*Rate*		*HRS*			*HRS*			*HRS*			*HRS*						
27				$0		$	-		$	-		$	-		$	-	$	-	$	-
28				$0		$	-		$	-		$	-		$	-	$	-	$	-
29				$0		$	-		$	-		$	-		$	-	$	-	$	-
30				$0		$	-		$	-		$	-		$	-	$	-	$	-
31				$0	5	$	-		$	-		$	-		$	-	$	-	$	-
32				$0		$	-		$	-		$	-		$	-	$	-	$	-
33	Total Subcontractors/Consultants			$0	5	$	-	0	$	-	0	$	-	0	$	-	$	-	$	-
34																				
35	III. Direct Materials (provide description and costs basis)																			
36	Curriculum Development & Training			$0													$0		$0	
37				$0													$0		$0	
38				$0													$0		$0	
39				$0													$0		$0	
40				$0													$0		$0	
41				$0													$0		$0	
42				$0													$0		$0	
43	Total Direct Materials			$0			$0			$0			$0			$0	$0		$0	
44																				
45	IV. Travel			$0													$0		$0	
46																				
47	V. Other Direct Costs *(list type and description such as venue rental costs and cost basis)*																			
48				$0													$	-	$	-
49				$0													$	-	$	-
50				$0													$	-	$	-
51				$0													$	-	$	-
52				$0													$	-	$	-
53	Total Other Direct Costs			$0		$	-		$	-		$	-		$	-	$	-	$	-
54																				
55	VI. General & Administrative Expense/Overhead	Rate (%):		$0		$	-		$0			$0			$0		$	-		$0	
56																				
57	**Total PROJECT COSTS**			**$4,983,075**		**$0**			**$0**			**$0**			**$0**		**$0**		**$4,983,075**	

LEGEND:

Formula cell
Data entry cell

This section is for post-contract invoicing only. Do not complete with proposal.